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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,847	10/714,847 11/18/2003		Richard Ormson	Q78552	3158
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
	10/714,847	ORMSON ET AL.					
Office Action Summary	Examiner	Art Unit					
	Ariel Balaoing	2683					
The MAILING DATE of this communication of Period for Reply	appears on the cover sheet w	ith the correspondence address					
A SHORTENED STATUTORY PERIOD FOR REITHE MAILING DATE OF THIS COMMUNICATIO - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory per - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	N. t.1.136(a). In no event, however, may a reply within the statutory minimum of thir iod will apply and will expire SIX (6) MON tute, cause the application to become AB	eply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. IANDONED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 18	3 November 2003.						
	his action is non-final.						
	-						
Disposition of Claims							
4a) Of the above claim(s) is/are without 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) <u>1-11,14 and 15</u> is/are rejected. 7) ☐ Claim(s) is/are objected to.	Claim(s) 1-11,14 and 15 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 1-11,14 and 15 is/are rejected. Claim(s) is/are objected to.						
Application Papers							
9) ☐ The specification is objected to by the Exam 10) ☑ The drawing(s) filed on 18 November 2003 is Applicant may not request that any objection to to Replacement drawing sheet(s) including the con 11) ☐ The oath or declaration is objected to by the	s/are: a)⊠ accepted or b)□ the drawing(s) be held in abeyar rection is required if the drawing	nce. See 37 CFR 1.85(a). (s) is objected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for fore a) □ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority docume 2. □ Certified copies of the priority docume 3. □ Copies of the certified copies of the p application from the International Bur * See the attached detailed Office action for a	ents have been received. ents have been received in A riority documents have been eau (PCT Rule 17.2(a)).	pplication No received in this National Stage					
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview S	Summary (PTO-413) s)/Mail Date					
2) ☐ Notice of Draitsperson's Patent Drawing Review (PTO-948) 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date		nformal Patent Application (PTO-152)					

DETAILED ACTION

Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 7 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 3. Claim recites the limitation "the signal strength" in line 2 of the claim. Claim 1 or 2, which this claim is dependent upon do not mention the limitation. There is insufficient antecedent basis for this limitation in the claim.
- 4. Claim 9 recites the limitation "the averaging sequence" in line 2 of the claim.

 Claim 1 or 2, which this claim is dependent upon do not mention the limitation. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1, 2, 9, 10, 11, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by OTTING et al (US 6,477,372 B1).

Regarding claim 1, OTTING discloses a method of network acquisition for a cellular radio communications device arranged to operate on a plurality of radio

technologies (abstract; column 4:lines 17-59) and comprising determining the most suitable cell based on a characteristic of signals received from a plurality of cells (314-Figure 3; 414-Figure 4; column 5:line 50-column 6:line 46), the signals from each cell being provided over a band of frequencies (314-Figure 3; 414-Figure 4; column 5:line 50-column 6:line 46), and the method being arranged for taking a series of measurements of the said characteristic for one radio technology and for each frequency (314-Figure 3; 414-Figure 4; column 5:line 50-column 6:line 46), wherein prior to the final measurement in the said series, the said characteristic of at least one measured signal for each frequency is compared with a predetermined value and if the comparison indicates that the radio technology is unlikely to produce a suitable cell (314-Figure 3; 414-Figure 4; column 2:lines 56-65; column 5:line 50-column 6:line 46), the step of switching to an alternative radio technology prior to the said final measurement in the series being taken and searching signals associated with the alternative radio technology to search for a suitable cell (abstract; column 4:lines 17-59; column 5:line 50-column 6:line 46).

Regarding claim 2, OTTING further discloses including the steps of searching on the alternative radio technology in the same manner as searching on an original radio technology (column 4:lines 17-59; column 5:line 50-column 6:line 46).

Regarding claim 9, see the rejections of the parent claim concerning the subject matter this claim is dependant upon. OTTING further discloses arranged for use in accordance with a dual mode, or multimode device (column 1:lines 14-30).

Regarding claim 10, OTTING discloses a cellular radio communications device arranged for operation on a plurality of radio technologies (abstract; column 4:lines 17-59) and including means for determining the most suitable cell based upon a characteristic of signals received from a plurality of cells and the signals from each cell being provided over a band frequencies (314-Figure 3; 414-Figure 4; column 5:line 50column 6:line 46), means for taking a series of measurements of the said characteristic for one radio technology for each frequency (314-Figure 3; 414-Figure 4; column 5:line 50-column 6:line 46), and including means for, prior to the final measurement in the said series being taken, comparing the said characteristic of at least one measured signal for each frequency with a predetermined value and determining that (314-Figure 3; 414-Figure 4; column 2:lines 56-65; column 5:line 50-column 6:line 46), if the comparison indicates that the radio technology is unlikely to produce a suitable cell, initiating means for switching to an alternative radio technology prior to the said final measurement in the series (abstract; column 4:lines 17-59; column 5:line 50-column 6:line 46), and for searching signals associated with the alternative radio technology to search for a suitable cell (column 4:lines 17-59; column 5:line 50-column 6:line 46).

Regarding claim 11, OTTING discloses a method for operating a cellular radio communications device arranged for operation on a plurality of radio technologies (abstract; column 4:lines 17-59) and including means for determining the most suitable cell based upon a characteristic of signals received from a plurality of cells and the signals from each cell being provided over a band frequencies (314-Figure 3; 414-Figure 4; column 5:line 50-column 6:line 46), means for taking a series of

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measurements of the said characteristic for one radio technology for each frequency (314-Figure 3; 414-Figure 4; column 5:line 50-column 6:line 46), and including means for, prior to the final measurement in the said series being taken, comparing the said characteristic of at least one measured signal for each frequency with a predetermined value and determining that (314-Figure 3; 414-Figure 4; column 2:lines 56-65; column 5:line 50-column 6:line 46), if the comparison indicates that the radio technology is unlikely to produce a suitable cell, initiating means for switching to an alternative radio technology prior to the said final measurement in the series (abstract; column 4:lines 17-59; column 5:line 50-column 6:line 46), and for searching signals associated with the alternative radio technology to search for a suitable cell (314-Figure 3; 414-Figure 4; column 5:line 50-column 6:line 46),), comprising a method according to claim 1 or 2 (see the rejections of claims 1 and 2 regarding the subject matter regarding this claim).

Regarding claim 14, OTTING discloses a method of network acquisition for a cellular radio communications device arranged to operate on a plurality of radio access technologies (abstract; column 4:lines 17-59) and comprising determining the most suitable cell based on a characteristic of signals received from a plurality of cells (314-Figure 3; 414-Figure 4; column 5:line 50-column 6:line 46), the signals from each cell being provided over a band of frequencies (314-Figure 3; 414-Figure 4; column 5:line 50-column 6:line 46), and the method being arranged for taking a series of measurements of the said characteristic for one radio access technology and for each frequency (314-Figure 3; 414-Figure 4; column 5:line 50-column 6:line 46), wherein prior to the final measurement in the said series, the said characteristic of at least one

measured signal for each frequency is compared with a predetermined value and if the comparison indicates that the radio access technology is unlikely to produce a suitable cell (314-Figure 3; 414-Figure 4; column 2:lines 56-65; column 5:line 50-column 6:line 46), the step of switching to an alternative radio access technology prior to the said final measurement in the series being taken and searching signals associated with the alternative radio access technology to search for a suitable cell (abstract; column 4:lines 17-59; column 5:line 50-column 6:line 46).

Regarding claim 15, OTTING discloses a cellular radio communications device arranged for operation on a plurality of radio access technologies (abstract; column 4:lines 17-59) and including means for determining the most suitable cell based upon a characteristic of signals received from a plurality of cells and the signals from each cell being provided over a band frequencies (314-Figure 3; 414-Figure 4; column 5:line 50column 6:line 46), means for taking a series of measurements of the said characteristic for one radio access technology for each frequency (314-Figure 3; 414-Figure 4; column 5:line 50-column 6:line 46), and including means for, prior to the final measurement in the said series being taken, comparing the said characteristic of at least one measured signal for each frequency with a predetermined value and determining that (314-Figure 3; 414-Figure 4; column 2:lines 56-65; column 5:line 50-column 6:line 46), if the comparison indicates that the radio access technology is unlikely to produce a suitable cell, initiating means for switching to an alternative radio access technology prior to the said final measurement in the series (abstract; column 4:lines 17-59; column 5:line 50column 6:line 46), and for searching signals associated with the alternative radio access

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technology to search for a suitable cell (column 4:lines 17-59; column 5:line 50-column 6:line 46).

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- ⁴ 8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
 - 9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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10. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over OTTING et al (US 6,477,372 B1) in view of NAKANO (US 6,725,041).

Regarding claim 3, see the rejections of the parent claim (both) regarding the subject matter this claim is dependent upon. However, OTTING does not disclose wherein the characteristic of the received signals is compared with the predetermined value after the first measurement in the series of measurements to be taken so as to obtain an average value. NAKANO discloses wherein the characteristic of the received signals is compared with the predetermined value after the first measurement in the series of measurements to be taken so as to obtain an average value (column 3:line 57-column 4:line 20). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify OTTING to include an averaging sequence for the signals received, as taught by NAKANO, as both systems relate to signal strength detection. This is beneficial in that a more accurate reading can be deduced when comparing measured signals over a predetermined time interval.

Regarding claim 8, see the rejections of the parent claim (both) regarding the subject matter this claim is dependent upon. OTTING further discloses including the steps of continuing measurements on a radio technology even if it is determined that no suitable cell is likely to be identified (410, 412, 414-Figure 4; column 3:line 45-column 4:line 16). However, OTTING does not disclose wherein the measurements are an averaging sequence. NAKANO discloses wherein the measurements are an averaging sequence (column 3:line 57-column 4:line 20). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify

OTTING to include an averaging sequence for the signals received, as taught by NAKANO, as both systems relate to signal strength detection. This is beneficial in that a more accurate reading can be deduced when comparing measured signals over a predetermined time interval.

11. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over OTTING et al (US 6,477,372 B1) in view of DILLINGER et al (US 2004/0058679 A1).

Regarding claim 4, see the rejections of the parent claim (both) regarding the subject matter this claim is dependant upon. However, OTTING does not disclose wherein the said predetermined value is set in the cellular radio communications device. DILLINGER discloses wherein the said predetermined value is set in the cellular radio communications device (paragraph 51-54). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify OTTING to include the predetermined value to be set within the mobile device, as taught by DILLINGER, as this would allow the multimode phone to calculate measurements from the handset.

Regarding claim 5, see the rejections of the parent claim (both) regarding the subject matter this claim is dependant upon. However, OTTING does not disclose wherein the said predetermined value is set for each radio technology. DILLINGER discloses wherein the said predetermined value is set for each radio technology (paragraph 51-54). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify OTTING to include the

predetermined value to be set for each radio technology, as taught by DILLINGER, as this would allow the multimode phone to calculate measurements from the handset.

12. Claims 6 and 7 rejected under 35 U.S.C. 103(a) as being unpatentable over OTTING et al (US 6,477,372 B1) in view of BRODY (US 4,670,899).

Regarding claim 6, see the rejections of the parent claim (both) regarding the subject matter this claim is dependent upon. However, OTTING does not disclose wherein the said characteristic of the signals comprises signal strength. BRODY discloses wherein the said characteristic of the signals comprises signal strength (column 18:lines 1-12). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify OTTING to determine cell suitability based on a received signal strength, as taught by BRODY, as both systems relate to cell selection. This is beneficial in that higher quality connections can be achieved when cells are above a determined threshold.

Regarding claim 7, see the rejections of the parent claim (both) regarding the subject matter this claim is dependent upon. However, OTTING does not disclose wherein the said characteristic of the signals comprises a derivative of the signal strength. BRODY discloses wherein the said characteristic of the signals comprises a derivative of the signal strength ((column 19:lines 19-48). Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify OTTING to determine cell suitability based on a received signal strength, as taught by BRODY, as both systems relate to cell selection. This is beneficial in that

higher quality connections can be achieved when cells are above a determined threshold.

Double Patenting

13. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer <u>cannot</u> overcome a double patenting rejection based upon 35 U.S.C. 101.

14. Applicant is advised that should claims 1 and 10 be found allowable, claims 14 and 15 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

EINOLA (US 5,960,354) – Multiband mobile phone using frequency list

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ariel Balaoing whose telephone number is (571) 272-

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7317. The examiner can normally be reached on Monday-Friday from 8:00 AM to 4:30

AM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ariel Balaoing Art Unit 2683 Patent Examiner

AB

AEL PEREZ-GUTIENT PATENT EXAMINER